

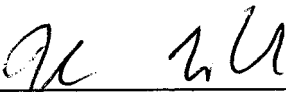
U.S. Patent Application Serial No. 10/720,330
Appeal Brief Under 37 CFR § 41.37
Docket No. 46521-56183

PATENT

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| In re application of: McCormick | : | Customer No. 021888 |
| | : | |
| Serial No.: 10/720,330 | : | Examiner: BOWERS, Nathan Andrew |
| | : | |
| Filed: November 24, 2003 | : | Group Art Unit: 1797 |
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| EXAMINATION | : | |

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Submitted herewith is Applicant's Appeal Brief, appealing the Final Rejection of Claims 6-14.

(1) Real Party in Interest

The real party in interest in this Appeal is McCormick Scientific, L.L.C. by an assignment recorded on June 6, 2005, at Reel No. 016097, Frame No. 0063.

(2) Related Appeals and Interferences

There are no related appeals or interferences.

(3) Status of Claims

Claims 6-14 are pending in the application. Claims 6-14 have been given a Final Rejection. This is an appeal of the Final Rejection of Claims 6-14.

(4) Status of Amendments

No amendments have been filed following the Final Rejection of Claims 6-14 mailed on November 15, 2007. A Pre-Appeal Brief Request for Review was filed on January 9, 2008, which was rejected on January 23, 2008.

(5) Summary of Claimed Subject Matter

Although Claims 6-14 have been given a Final Rejection, only Claims 6 and 13 are independent claims.

Independent Claim 6

The subject matter of the invention defined by independent Claim 6 is a system of stackable tissue processing cassettes shown in FIGS. 1-4 comprising a first cassette

11, the first cassette 11 comprising a bottom wall 13, a front wall 15, a back wall 17, and two side walls 19 with the bottom wall 13, the front wall 15, the back wall 17, and the side wall 19 forming a first container (also 11) having a top opening (as shown in Fig. 1), wherein a histological specimen can be placed within the first container 11 through the top opening (as shown in Fig. 1) of the first container 11; and a second cassette 11 shown in Fig. 9, the second cassette 11 comprising a bottom wall 13, a front wall 15, a back wall 17, and two side walls 19 with the bottom wall 13, the front wall 15, the back wall 17, and the side wall 19 of the second cassette 11 forming a second container 11, the bottom wall 13 of the second cassette 11 includes a plurality of apertures 21 extending therethrough, wherein the first cassette 11 can be interlocked with the second cassette 11, as shown in Fig. 9, such that the bottom wall 13 of the second cassette 11 closes the top opening, shown in Fig. 1, of the first container 11 to prevent the histological specimen from exiting the first container 11, wherein the plurality of apertures 21 of the bottom wall 13 of the second cassette 11 allow liquid paraffin to flow from one of the first and second containers 11 and into the other of the first and second containers 11 while the first and second cassettes 11 remain interlocked, as shown in Fig. 9. Applicants' Published Specification, i.e., U.S. Patent Application No. 2005/0112031 in Paragraph [0021], Lines 1-17.

Independent Claim 13

The subject matter of the invention defined by independent Claim 13 is a system of stackable tissue processing cassettes shown in FIGS. 1-4 comprising a first cassette 11, the first cassette 11 comprising a bottom wall 13, a front wall 15, a back

wall 17, and two side walls 19 with the bottom wall 13, the front wall 15, the back wall 17, and the side wall 19 forming a first container (also 11) having a top opening (as shown in Fig. 1), wherein a histological specimen can be placed within the first container 11 through the top opening (as shown in Fig. 1) of the first container 11; and a second cassette 11 shown in Fig. 9, the second cassette 11 comprising a bottom wall 13, a front wall 15, a back wall 17, and two side walls 19 with the bottom wall 13, the front wall 15, the back wall 17, and the side wall 19 forming a second container 11, the bottom wall 13 of the second cassette 11 comprising a plurality of apertures 21 extending therethrough, wherein the first cassette 11 can be interlocked with the second cassette 11, as shown in Fig. 9, wherein the plurality of apertures 21 of the bottom wall 13 of the second cassette 11 allow liquid paraffin to flow from one of the first and second containers 11 and into the other of the first and second containers 11 while the first and second cassettes 11 remain interlocked, as shown in Fig. 9.

Applicants' Published Specification, i.e., U.S. Patent Application No. 2005/0112031 in Paragraph [0021], Lines 1-17.

(6) Grounds of rejection to be reviewed on Appeal

The grounds of rejection to be reviewed on Appeal is the final rejection of Claims 6 and 10-14 under 35 U.S.C. § 103(a) for being unpatentable over Mathus et al. (U.S. Patent No. 5,856,176) in view of Berry et al. (U.S. Patent No. 5,240,854). The grounds of rejection to be reviewed on Appeal also include the final rejection of Claims 7-9 under 35 U.S.C. § 103(a) for being unpatentable over Mathus et al. (U.S. Patent

No. 5,856,176) in view of Berry et al. (U.S. Patent No. 5,240,854) as applied to Claim 6 and further in view of Intengan (U.S. Patent No. 4,440,301).

(7) Argument

Claim Rejections – 35 U.S.C. § 103(a)

Claims 6 and 10-14 under 35 U.S.C. § 103(a) for being unpatentable over Mathus et al. (U.S. Patent No. 5,856,176) in view of Berry et al. (U.S. Patent No. 5,240,854).

Independent Claim 6

Claim 6 recites: "...wherein the **first cassette can be interlocked with the second cassette** such that the bottom wall of the second cassette closes the top opening of the first container to prevent the histological specimen from exiting the first container, wherein **the plurality of apertures of the bottom wall of the second cassette allow liquid paraffin to flow from one of the first and second containers and into the other of the first and second containers while the first and second cassettes remain interlocked**" (emphasis added).

Mathus et al. is directed to a culture dish or Petri dish. Mathus et al. discloses: "Culture dishes are known and widely used in laboratory environments for growing cell cultures, bacteria, viruses and the like". (Mathus et al., Column 1, Lines 10-12). It is stated by the Examiner Bowers in the Office Action dated November 15, 2007 on Page 2, Lines 25-26, that "...it is unclear if these apertures are sufficient to allow liquids to flow from one cassette to the other." To the contrary, it is respectfully believed that it

is very clear in Mathus et al. that liquids flowing between petri dishes create a tremendous problem and is completely undesirable. For example, Mathus et al. recites: "The circulation of air can also limit the development of condensation between adjacent dishes, and prevent a vacuum or **fluid lock** between the dish and a surface on which it is disposed, such as another dish on which it is stacked or a laboratory bench. For example, the spaces **prevent a layer of fluid** from building up between the base and the surface on which it is disposed, which could hydraulically lock the two together, making it difficult to separate them" (emphasis added) (Mathus et al., Column 3, Lines 37-45). Mathus et al. also recites: "As described above, this allows for uniform temperature distribution across the bottom of the upper dish, **and avoids condensation build up and creation of a fluid** or vacuum lock **between the dishes**. Alternatively, the height of the interlocking wall can be made equal to or greater than the height of the beads 32, and the interlocking wall can be interrupted to allow for air circulation between stacked dishes" (emphasis added) (Mathus et al., Column 5, Lines 2-5). Therefore, Mathus et al. clearly teaches and specifically instructs someone not to allow liquid (paraffin or otherwise) to flow between containers.

Berry et al. is cited for the proposition of allowing liquid to flow between stackable containers. Berry et al. recites: "When the plates 26 are stacked in the assembled device, the top edge 35 of wall 32 **mates and seals with the lower surface 36 of the adjacent plate to define a growth chamber**, the ceiling of the chamber being defined by the lower surface 36 of the adjacent plate. To facilitate the mating arrangement of the stacked plates, the wall 32 is provided on its top edge 35 with a groove 33 for receiving a mating ridge 37 on the bottom surface of an adjacent plate.

The mating ridge 37 and groove 33 align the stacked plates" (emphasis added) (Berry et al., Column 4, Lines 13-18). Therefore, although liquid enters a common inlet conduit 16 and exits a common outlet conduit 18, the containers are sealed. Consequently, there are no plurality of apertures of the bottom wall of the second cassette and it is impossible for liquid paraffin to flow from one of the first and second containers and into the other of the first and second containers. This need for having containers that do not allow liquid to flow between them is again emphasized by Berry et al., which recites: "In another embodiment, a cell culture vessel similar to that depicted in FIGS. 1-4 may be formed of a series of flat plates sandwiching gaskets, the gaskets forming the side walls and restriction ports of the growth chambers (FIG. 8). In this embodiment, the plates 126 have substantially flat upper and lower surfaces" (Berry et al., Column 7, Lines 9-14). A "gasket" is defined as "any of a wide variety of seals or packings used between matched machine parts or around pipe joints to prevent the escape of a gas or fluid". The American Heritage® Dictionary of the English Language, Fourth Edition. Houghton Mifflin Company, 2004. 06 Feb. 2008. <Dictionary.com <http://dictionary.reference.com/browse/gasket>> See Evidence Appendix. Therefore, a crucial feature of Berry et al. is to allow the passage of fluid through a container but prevent the passage of liquid between stacked containers. In fact, one of the objects of Berry et al. is to "...to provide a cell culture assembly that allows for the automatic, continuous addition of nutrient medium and the removal of conditioned medium containing the products and waste formed by the cells" (Berry et al., Column 1, Lines 35-39). This object of the invention would be thwarted if liquid flowed between adjacent containers through apertures. It is respectfully believed to be axiomatic that a

feature that is not disclosed in either of two cited references cannot come into being by their combination.

Moreover, "if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification". *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). In this case, a reference, i.e., Mathus et al., clearly states the problems associated with allowing liquid to flow between containers. These problems will destroy the purpose of preventing adjacent petri dishes from being contaminated. "In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification". *In re Linter*, 458 F.2d 1013, 1016, 173 U.S.P.Q. 560, 562 (C.C.P.A. 1972).

Therefore, Mathus et al. clearly teaches away from the Applicant's Invention, as claimed, in addition to destroying the Applicant's Invention for its intended purpose. The Supreme Court held in *U.S. v. Adams*, 383 U.S. 39, 148 U.S.P.Q. 479 (1966), that one important indicium of nonobviousness is "teaching away" from the claimed invention by the prior art or by experts in the art at (and/or after) the time the invention was made. This is specifically mandated by the Manual of Patent Examining Procedure (M.P.E.P.) § 2141.02, which recites: "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention". *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540,

220 U.S.P.Q. 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Moreover, "...if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990).

Moreover, even if there was a hint or suggestion to combine Mathus et al. with Berry et al. (which there is not), Berry et al. does not disclose liquid flow between containers with a plurality of apertures in the bottom wall. Berry et al. merely discloses a common liquid inlet and a common liquid outlet with no liquid passing through apertures in adjacent containers. Therefore, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (C.C.P.A. 1959). Moreover, there is no teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 82 U.S.P.Q.2d 1385 (U.S. 2007). In determining obviousness, the proper analysis is whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts. "To reject a claim based on this rationale, U.S. Patent Office personnel must resolve the Graham

factual inquiries. Office personnel must then articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art **being the lack of actual combination of the elements in a single prior art reference;** (2) a finding that one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, **each element merely would have performed the same function as it did separately**" (emphasis added) (Federal Register / Volume 72, No. 195 / Wednesday, October 10, 2007 / Notices, Page 57529, *"Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc."*). It is respectfully believed that it is very clear that this rejection completely fails the new KSR Guidelines promulgated by the United States Patent Office.

Therefore, it is respectfully believed that the rejection of Claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Mathus et al. in view of Berry et al. should be reversed.

Dependent Claim 10

In addition to the arguments stated above with reference to Claim 6, dependent Claim 10 recites: "...the bottom wall of the first cassette includes a plurality of apertures extending therethrough". Mathus et al. recites: "The base 22 and lid 24 can each be of a unitary molded construction formed from a plastic material. In one embodiment of the invention, the base 22 and lid 24 are molded from a transparent polymer, such as polystyrene, to facilitate the visual inspection of the cultures in the

dish 20. However, it should be understood that other materials can also be used” (Mathus et al., Column 3, Lines 7-12). As shown in FIG. 4, there are no openings in the base 22. Moreover, Mathus et al. recites: “For example, the spaces prevent a layer of fluid from building up between the base and the surface on which it is disposed, which could hydraulically lock the two together, making it difficult to separate them” (Mathus et al., Column 3, Lines 41-45). Therefore, this feature is completely absent from Mathus et al.

Berry et al. recites: “When the plates 26 are stacked in the assembled device, the top edge 35 of wall 32 **mates and seals with the lower surface 36 of the adjacent plate to define a growth chamber**, the ceiling of the chamber being defined by the lower surface 36 of the adjacent plate. To facilitate the mating arrangement of the stacked plates, the wall 32 is provided on its top edge 35 with a groove 33 for receiving a mating ridge 37 on the bottom surface of an adjacent plate. The mating ridge 37 and groove 33 align the stacked plates” (emphasis added) (Berry et al., Column 4, Lines 13-18). Therefore, although liquid enters a common inlet conduit 16 and exits a common outlet conduit 18, the containers are sealed. Consequently, this feature is completely absent from Berry et al.

“To reject a claim based on this rationale, U.S. Patent Office personnel must resolve the Graham factual inquiries. Office personnel must then articulate the following: (1) **a finding that the prior art included each element claimed**, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference; (2) a finding that one of ordinary skill in the art

could have combined the elements as claimed by known methods, and that in combination, **each element merely would have performed the same function as it did separately**" (emphasis added) (Federal Register / Volume 72, No. 195 / Wednesday, October 10, 2007 / Notices, Page 57529, "*Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc.*"). In this case, the recited element in Claim 10 is wholly absent and the presence of a bottom wall of the first cassette having a plurality of apertures extending therethrough would destroy the intended purpose of both Mathus et al. and Berry et al. both individually and collectively. If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Also, since Claim 10 depends from and contains all of the limitations of Claim 6, Claim 10 is felt to distinguish over Mathus et al. in view of Berry et al. in the same manner as Claim 6. Therefore, Claim 10 overcomes the rejection under 35 U.S.C. § 103(a). If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Therefore, it is respectfully believed that the rejection of Claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Mathus et al. in view of Berry et al. should be reversed.

Dependent Claim 11

In addition to the arguments stated above with reference to Claim 6, dependent Claim 11 recites: "...each of the side walls of the first cassette includes a plurality of apertures extending therethrough". Mathus et al. recites: "The base 22 includes a substantially planar bottom wall 26 and a **continuous sidewall** 28 extending upwardly from the bottom wall 26 along its entire periphery to form an upwardly facing cavity 30 (FIG. 5A) within which cultures can be grown" (emphasis added) (Mathus et al., Column 3, Lines 13-17). Therefore, as shown in Figs. 1 and 2, this recited claim feature is wholly absent from Mathus et al. Berry et al. recites: "In exterior view (FIG. 1), the vessel 10 is a substantially square box with square, molded top 12 and base 13, and **vertical molded sidewalls 14** sealed along the edges to provide a **fluid-tight arrangement** for housing the growth chambers" (emphasis added) (Berry et al., Column 2, Lines 55-59). Therefore, as shown in Fig. 1, this recited claim feature is wholly absent from Berry et al. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 U.S.P.Q.2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with

respect to the motivation to combine references); *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992). In this situation, neither Mathus et al. nor Berry et al. teach side walls of the first cassette **with a plurality of apertures extending therethrough**.

Also, since Claim 11 depends from and contains all of the limitations of Claim 6, Claim 11 is felt to distinguish over Mathus et al. in view of Berry et al. in the same manner as Claim 6. Therefore, Claim 11 overcomes the rejection under 35 U.S.C. § 103(a). If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Therefore, it is respectfully believed that the rejection of Claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Mathus et al. in view of Berry et al. should be reversed.

Dependent Claim 12

Since Claim 12 depends from and contains all of the limitations of Claim 6, Claim 12 is felt to distinguish over Mathus et al. in view of Berry et al. in the same manner as Claim 6. Therefore, Claim 12 overcomes the rejection under 35 U.S.C. § 103(a). If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Therefore, it is respectfully believed that the rejection of Claim 12 under 35 U.S.C. § 103(a) as being unpatentable over Mathus et al. in view of Berry et al. should be reversed.

Independent Claim 13

Claim 13 recites: "...wherein the **first cassette can be interlocked with the second cassette** such that the bottom wall of the second cassette closes the top opening of the first container to prevent the histological specimen from exiting the first container, wherein **the plurality of apertures of the bottom wall of the second cassette allow liquid paraffin to flow from one of the first and second containers and into the other of the first and second containers while the first and second cassettes remain interlocked**" (emphasis added).

Mathus et al. is directed to a culture dish or Petri dish. Mathus et al. discloses: "Culture dishes are known and widely used in laboratory environments for growing cell cultures, bacteria, viruses and the like". (Mathus et al., Column 1, Lines 10-12). It is stated by the Examiner Bowers in the Office Action dated November 15, 2007 on Page 2, Lines 25-26, that "...it is unclear if these apertures are sufficient to allow liquids to flow from one cassette to the other". To the contrary, it is respectfully believed that it is very clear in Mathus et al. that liquids flowing between petri dishes create a tremendous problem and is completely undesirable. For example, Mathus et al. recites: "The circulation of air can also limit the development of condensation between adjacent dishes, and prevent a vacuum or **fluid lock** between the dish and a surface on which it is disposed, such as another dish on which it is stacked or a laboratory bench.

For example, the spaces **prevent a layer of fluid** from building up between the base and the surface on which it is disposed, which could hydraulically lock the two together, making it difficult to separate them" (emphasis added) (Mathus et al., Column 3, Lines 37-45). Mathus et al. also recites: "As described above, this allows for uniform temperature distribution across the bottom of the upper dish, **and avoids condensation build up and creation of a fluid** or vacuum lock **between the dishes**. Alternatively, the height of the interlocking wall can be made equal to or greater than the height of the beads 32, and the interlocking wall can be interrupted to allow for air circulation between stacked dishes" (emphasis added) (Mathus et al., Column 5, Lines 2-5). Therefore, Mathus et al. clearly teaches and specifically instructs someone not to allow liquid (paraffin or otherwise) to flow between containers.

Berry et al. is cited for the proposition of allowing liquid to flow between stackable containers. Berry et al. recites: "When the plates 26 are stacked in the assembled device, the top edge 35 of wall 32 **mates and seals with the lower surface 36 of the adjacent plate to define a growth chamber**, the ceiling of the chamber being defined by the lower surface 36 of the adjacent plate. To facilitate the mating arrangement of the stacked plates, the wall 32 is provided on its top edge 35 with a groove 33 for receiving a mating ridge 37 on the bottom surface of an adjacent plate. The mating ridge 37 and groove 33 align the stacked plates" (emphasis added) (Berry et al., Column 4, Lines 13-18). Therefore, although liquid enters a common inlet conduit 16 and exits a common outlet conduit 18, the containers are sealed. Consequently, there are no plurality of apertures of the bottom wall of the second cassette and it is impossible for liquid paraffin to flow from one of the first and second containers and

into the other of the first and second containers. This need for having containers that do not allow liquid to flow between them is again emphasized by Berry et al., which recites: "In another embodiment, a cell culture vessel similar to that depicted in FIGS. 1-4 may be formed of a series of flat plates sandwiching gaskets, the gaskets forming the side walls and restriction ports of the growth chambers (FIG. 8). In this embodiment, the plates 126 have substantially flat upper and lower surfaces" (Berry et al., Column 7, Lines 9-14). A "gasket" is defined as "any of a wide variety of seals or packings used between matched machine parts or around pipe joints to prevent the escape of a gas or fluid". The American Heritage® Dictionary of the English Language, Fourth Edition. Houghton Mifflin Company, 2004. 06 Feb. 2008. <Dictionary.com <http://dictionary.reference.com/browse/gasket>> See Evidence Appendix. Therefore, a crucial feature of Berry et al. is to allow the passage of fluid through a container but prevent the passage of liquid between stacked containers. In fact, one of the objects of Berry et al. is to "...to provide a cell culture assembly that allows for the automatic, continuous addition of nutrient medium and the removal of conditioned medium containing the products and waste formed by the cells" (Berry et al., Column 1, Lines 35-39). This object of the invention would be thwarted if liquid flowed between adjacent containers through apertures. It is respectfully believed to be axiomatic that a feature that is not disclosed in either of two cited references cannot come into being by their combination.

Moreover, "if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification". *In re Gordon*, 733 F.2d 900,

221 U.S.P.Q. 1125 (Fed. Cir. 1984). In this case, a reference, i.e., Mathus et al., clearly states the problems associated with allowing liquid to flow between containers. These problems will destroy the purpose of preventing adjacent petri dishes from being contaminated. "In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification". *In re Linter*, 458 F.2d 1013, 1016, 173 U.S.P.Q. 560, 562 (C.C.P.A. 1972).

Therefore, Mathus et al. clearly teaches away from the Applicant's Invention, as claimed, in addition to destroying the Applicant's Invention for its intended purpose. The Supreme Court held in *U.S. v. Adams*, 383 U.S. 39, 148 U.S.P.Q. 479 (1966), that one important indicium of nonobviousness is "teaching away" from the claimed invention by the prior art or by experts in the art at (and/or after) the time the invention was made. This is specifically mandated by the Manual of Patent Examining Procedure (M.P.E.P.) § 2141.02, which recites: "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention". *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Moreover, "...if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification". *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). The mere fact that references can be combined or modified does not

render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990).

Moreover, even if there was a hint or suggestion to combine Mathus et al. with Berry et al. (which there is not), Berry et al. does not disclose liquid flow between containers with a plurality of apertures in the bottom wall. Berry et al. merely discloses a common liquid inlet and a common liquid outlet with no liquid passing through apertures in adjacent containers. Therefore, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (C.C.P.A. 1959). Moreover, there is no teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 82 U.S.P.Q.2d 1385 (U.S. 2007). In determining obviousness, the proper analysis is whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts. "To reject a claim based on this rationale, U.S. Patent Office personnel must resolve the Graham factual inquiries. Office personnel must then articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art **being the lack of actual combination of the elements in a single prior art reference**; (2) a finding that one of ordinary skill in the art could have combined the elements as

claimed by known methods, and that in combination, **each element merely would have performed the same function as it did separately**" (emphasis added) (Federal Register / Volume 72, No. 195 / Wednesday, October 10, 2007 / Notices, Page 57529, "*Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc.*"). It is respectfully believed that it is very clear that this rejection completely fails the new KSR Guidelines promulgated by the United States Patent Office.

Therefore, it is respectfully believed that the rejection of Claim 13 under 35 U.S.C. § 103(a) as being unpatentable over Mathus et al. in view of Berry et al. should be reversed.

Dependent Claim 14

Claim 14 recites: "...wherein the first cassette is devoid of a lid for closing the top opening of the first container, and the first cassette interlocks with the second cassette such that the bottom wall of the second cassette closes the top opening of the first container to prevent the histological specimen from exiting the first container". Since Claim 14 depends from and contains all of the limitations of Claim 13, Claim 14 is felt to distinguish over Mathus et al. in view of Berry et al. in the same manner as Claim 13. Therefore, Claim 14 overcomes the rejection under 35 U.S.C. § 103(a). If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

In addition, neither Mathus et al. nor Berry et al. disclose a **histological specimen**. Also, Mathus et al. discloses stackable petri dishes and Berry et al. discloses stackable reagent microscope slides. There is not the slightest hint or suggestion as to whether these disclosed containers would be able to hold a histological specimen in place in the first container after being exposed to a flow of liquid paraffin through apertures that do not exist in either Reference. When evaluating a claim for obviousness, all claim limitations must be considered. *In re Evanega*, 829 F.2d 1110, 4 U.S.P.Q. 2d 1249 (Fed. Cir. 1987).

Therefore, it is respectfully believed that the rejection of Claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Mathus et al. in view of Berry et al. should be reversed.

Claims 7-9 were rejected under 35 U.S.C. § 103(a) for being unpatentable over Mathus et al. (U.S. Patent No. 5,856,176) in view of Berry et al. (U.S. Patent No. 5,240,854) as applied to Claim 6 and further in view of Intengan (U.S. Patent No. 4,440,301).

Dependent Claim 7

Claim 7 recites: "...the second cassette can be interlocked with the first cassette when the second cassette is positioned relative to the first cassette and the first cassette and the second cassette are snapped together". Since Claim 7 depends from and contains all of the limitations of Claim 6, Claim 7 is felt to distinguish over Mathus et al. in view of Berry et al. in the same manner as Claim 6. Therefore, Claim 7 overcomes the rejection under 35 U.S.C. § 103(a). If an independent claim is

nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Moreover, Intengan recites: "In order to provide the required frictional and flexing properties of the slide, planar body 14 is constructed as a **one-piece element of a resilient plastic material**" (emphasis added) (Column 3, Lines 49-51). Therefore, like Mathus et al. and Berry et al., there is **no** plurality of apertures of the bottom wall of the second cassette to allow liquid paraffin to flow from one of the first and second containers and into the other of the first and second containers. It is respectfully believed to be axiomatic that a feature that is not disclosed in any of three cited references cannot come into being by their combination. It is well established in U.S. Patent Law as well as the Manual for Patent Examining Procedure (M.P.E.P.) § 2143.03 that to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art". *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

Moreover, Intengan is a reagent slide having a **circular** indentation to hold biological fluid. Therefore, there is a lack of identifiable front, back and side walls. This reference is only cited for the proposition that the slides "click" when the slides are slid together. "To reject a claim based on this rationale, U.S. Patent Office personnel must resolve the Graham factual inquiries. Office personnel must then articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, **with the only difference**

between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference;" (Federal Register / Volume 72, No. 195 / Wednesday, October 10, 2007 / Notices, Page 57529, *"Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc."*). This is decidedly not the case with regard to Claim 7 since there is no plurality of apertures of the bottom wall of the second cassette to allow liquid paraffin to flow from one of the first and second containers and into the other of the first and second containers.

Therefore, it is respectfully believed that the rejection of Claim 7 under 35 U.S.C. § 103(a) for being unpatentable over Mathus et al. in view of Berry et al. as applied to Claim 6 and further in view of Intengan should be reversed.

Dependent Claim 8

Claim 8 recites: "...the first cassette interlocks with the second cassette such that when the first cassette is snapped together with the second cassette, there is an audible sound upon completion". Since Claim 8 depends from and contains all of the limitations of Claims 7 and 6, Claim 8 is felt to distinguish over Mathus et al. in view of Berry et al. in the same manner as Claims 7 and 6. Therefore, Claim 8 overcomes the rejection under 35 U.S.C. § 103(a). If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Moreover, there is an acknowledgement by the Examiner that this feature is not specifically found in the cited prior art. "It is known in the art and is common knowledge that a "snapping"

action produces an audible, sensory effect that signifies when a locking arrangement has been formed.” (Final Office Action dated November 15, 2007, Page 4, Lines 1-3).

It was explicitly held in *In re Sang Sung Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002), that rejection of patent application must be based on evidence comprehended by language of that section, and search for and analysis of prior art includes evidence relevant to finding of whether there is teaching, motivation, or suggestion to modify a reference, and the Board of Patent Appeals and Interferences must explain reasons why one of ordinary skill in art would have been motivated to select a reference and to modify it. In this case, it is respectfully believed that there is no objective evidence of record that would lead an individual of ordinary skill in the art to modify Intengan to create a snapping sound. Moreover, the Examiner states the motivation from Intengan: “In column 2, lines 8-14, Intengan teaches that this arrangement is beneficial because it allows the cassettes to be frictionally held together so that the cassettes will remain in an organized stack. In this way, the cassettes are arranged in an orderly fashion, and will be **less prone to contamination and leakage** during storage. The snapping action of the engagement between leaf and boss is also desirable because it produces an audible effect that verifies that a tight lock between cassettes has been produced” (emphasis added) (Final Office Action dated November 15, 2007, Page 4, Lines 7-13). This analysis is completely erroneous since the Applicant’s Invention as claimed (Claim 6) requires “liquid paraffin to flow from one of the first and second containers and into the other of the first and second containers while the first and second cassettes remain interlocked”. Therefore, leakage and contamination between containers is mandated by the Applicant’s Claim. The Supreme Court held in

U.S. v. Adams, 383 U.S. 39, 148 U.S.P.Q. 479 (1966), that one important indicium of nonobviousness is “teaching away” from the claimed invention by the prior art or by experts in the art at (and/or after) the time the invention was made. This is specifically mandated by the *Manual of Patent Examining Procedure* (M.P.E.P.) § 2141.02. It is respectfully believed that a citation of prior art references that teaches, based on the Examiner’s analysis, that leakage and contamination between containers is undesirable would provide strong evidence as to the patentability of the Applicant’s Invention since the recited claim language requires liquid paraffin to flow from one of the first and second containers and into the other of the first and second containers creating both leakage and contamination.

Therefore, it is respectfully believed that the rejection of Claim 8 under 35 U.S.C. § 103(a) for being unpatentable over Mathus et al. in view of Berry et al. as applied to Claim 6 and further in view of Intengan should be reversed.

Dependent Claim 9

Claim 9 recites: “...wherein the bottom wall of the first cassette includes a portion having a generally planer upper face so that when the first cassette interlocks with the second cassette, the second cassette is moved relative to the first cassette in a direction generally perpendicular to the generally planer upper face so that the first cassette and the second cassette are snapped together”. Since Claim 9 depends from and contains all of the limitations of Claims 8, 7 and 6, Claim 9 is felt to distinguish over Mathus et al. in view of Berry et al. in the same manner as Claims 8, 7 and 6. Therefore, Claim 9 overcomes the rejection under 35 U.S.C. § 103(a). If an

independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Moreover, instead of **moving the cassettes in a perpendicular direction to each other for attachment in accordance with the Applicant's claimed Invention**, Intengan moves the reagent slides **in parallel** using rib and grove combinations until the microscope slides are aligned in a stack. For example, Intengan recites: "...said planar body being further provided with interlocking means said interlocking means comprising **ribs and mating grooves arranged along an axis parallel to the plane of said planar body so as to permit the sliding engagement and disengagement of the top face of said slide with the bottom face of a slide of like construction**" (emphasis added) (Intengan, Claim 1, Column 4, Lines 19-27). In determining obviousness, the proper analysis is whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts. "To reject a claim based on this rationale, U.S. Patent Office personnel must resolve the Graham factual inquiries. Office personnel must then articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference; (2) a finding that one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, **each element merely would have performed the same function as it did separately**" (Federal Register / Volume 72, No. 195 /

Wednesday, October 10, 2007 / Notices, Page 57529, "*Examination Guidelines for*

Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc."). In this case, the Applicant's Invention of attaching histological cassettes in a vertical stack, such as "[w]hen stacked, the flexible leafs on an underlying cassette engage the bosses on an overlying cassette in a locking engagement" (McCormick, U.S. Patent Publication No. 2005/0112031, Column [0009], Lines 4-6), presents a marked contrast to Intengan that uses ribs and groves to slide reagent slides into a vertical stack. Therefore, Applicant's claimed Invention functions in a totally different manner than as disclosed in Intengan, thereby violating the United States Patent Office's Guidelines under *KSR International Co. v. Teleflex Inc.*, 82 U.S.P.Q.2d 1385 (U.S. 2007). Moreover, there is no hint, motivation or suggestion to change the mechanism for attachment of the containers (slides) in Intengan. In fact, the Examiner explicitly states that "[i]n column 2, lines 8-14, Intengan teaches that this arrangement is beneficial because it allows the cassettes to be **frictionally held together so that the cassettes will remain in an organized stack**. In this way, the cassettes are arranged in an orderly fashion, and **will be less prone to contamination and leakage during storage**" (emphasis added) (Final Office Action dated November 15, 2007, Page 4, Lines 7-11). Therefore, the sliding of reagent slides together with ribs and groves has the opposite of the Applicant's claimed invention and prevents **contamination and leakage while Applicant's claimed invention requires**: "liquid paraffin to flow from one of the first and second containers and into the other of the first and second containers while the first and second cassettes remain interlocked". This would require leakage and associated contamination due to liquid paraffin flowing between the containers. Obviousness can

only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so.

In re Kahn, 441 F.3d 977, 986, 78 U.S.P.Q.2d 1329, 1335 (Fed. Cir. 2006).

Therefore, it is respectfully believed that the rejection of Claim 9 under 35 U.S.C. § 103(a) for being unpatentable over Mathus et al. in view of Berry et al. as applied to Claim 6 and further in view of Intengan should be reversed.

For all the reasons set forth above, it is respectfully submitted that the rejections of Claims 6-14 should be reversed and the Claims allowed.

(8) Claims Appendix

6. A system of stackable tissue processing cassettes comprising:

a first cassette, the first cassette comprising a bottom wall, a front wall, a back wall, and two side walls with the bottom wall, the front wall, the back wall, and the side wall forming a first container having a top opening, wherein a histological specimen can be placed within the first container through the top opening of the first container; and

a second cassette, the second cassette comprising a bottom wall, a front wall, a back wall, and two side walls with the bottom wall, the front wall, the back wall, and the side wall of the second cassette forming a second container, the bottom wall of the second cassette includes a plurality of apertures extending therethrough, wherein the first cassette can be interlocked with the second cassette such that the bottom wall of the second cassette closes the top opening of the first container to prevent the histological specimen from exiting the first container, wherein the plurality of apertures of the bottom wall of the second cassette allow liquid paraffin to flow from one of the first and second containers and into the other of the first and second containers while the first and second cassettes remain interlocked.

7. The system of stackable tissue processing cassettes in accordance with claim 6, wherein the second cassette can be interlocked with the first cassette when the second cassette is positioned relative to the first cassette and the first cassette and the second cassette are snapped together.

8. The system of stackable tissue processing cassettes in accordance with claim 7, wherein the first cassette interlocks with the second cassette such that when the first cassette is snapped together with the second cassette, there is a audible sound upon completion.

9. The system of stackable tissue processing cassettes in accordance with claim 8, wherein the bottom wall of the first cassette includes a portion having a generally planer upper face so that when the first cassette interlocks with the second cassette, the second cassette is moved relative to the first cassette in a direction generally perpendicular to the generally planer upper face so that the first cassette and the second cassette are snapped together.

10. The system of stackable tissue processing cassettes in accordance with claim 6, wherein the bottom wall of the first cassette includes a plurality of apertures extending therethrough.

11. The system of stackable tissue processing cassettes in accordance with claim 10, wherein each of the side walls of the first cassette includes a plurality of apertures extending therethrough.

12. The system of stackable tissue processing cassettes in accordance with claim 6, wherein the first cassette and the second cassette have generally identical geometry and dimensions.

13. A system of stackable tissue processing cassettes comprising:



a first cassette, the first cassette comprising a bottom wall, a front wall, a back wall, and two side walls with the bottom wall, the front wall, the back wall, and the side wall forming a first container having a top opening, wherein a histological specimen can be placed within the first container through the top opening of the first container; and

a second cassette, the second cassette comprising a bottom wall, a front wall, a back wall, and two side walls, with the bottom wall, the front wall, the back wall, and the side wall forming a second container, the bottom wall of the second cassette comprising a plurality of apertures extending therethrough, wherein the first cassette can be interlocked with the second cassette, wherein the plurality of apertures of the bottom wall of the second cassette allow liquid paraffin to flow from one of the first and second containers and into the other of the first and second containers while the first and second cassettes remain interlocked.

14. The system of stackable tissue processing cassettes in accordance with claim 13, wherein the first cassette is devoid of a lid for closing the top opening of the first container, and the first cassette interlocks with the second cassette such that the bottom wall of the second cassette closes the top opening of the first container to prevent the histological specimen from exiting the first container.

(9) Evidence Appendix

American Heritage Dictionary – [Cite This Source](#) – [Share This](#)

gas·ket   (gās'kĭt) [Pronunciation Key](#)
n.

1. Any of a wide variety of seals or packings used between matched machine parts or around pipe joints to prevent the escape of a gas or fluid.
2. *Nautical* A cord or canvas strap used to secure a furled sail to a yard boom or gaff.

[Perhaps alteration of French *garcette*, *small cord*, diminutive of *garce*, *girl*, from Old French, feminine of *gars*, *boy*, *soldier*, see **garçon**.]

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(10) Related Proceedings Appendix

None.

It is respectfully submitted that, for the reasons set forth above, the rejections of Claims 6-14 were made in error and should be reversed and the Claims 6-14 allowed.

An oral hearing is not requested.

Respectfully submitted,

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